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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/747,766	12/29/2003	Daryl Carvis Cromer	RPS920030243US1	6471
25299	7590	05/10/2005	EXAMINER	
IBM CORPORATION PO BOX 12195 DEPT 9CCA, BLDG 002 RESEARCH TRIANGLE PARK, NC 27709			KOVAL, MELISSA J	
			ART UNIT	PAPER NUMBER
			2851	.
			DATE MAILED: 05/10/2005	

Please find below and/or attached an Office communication concerning this application or proceeding:

/A JF

<b>Office Action Summary</b>	<b>Application No.</b> 10/747,766	<b>Applicant(s)</b> CROMER ET AL.	
	<b>Examiner</b> Melissa J. Koval	<b>Art Unit</b> 2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-16, and 20-22 is/are rejected.
- 7) ☒ Claim(s) 4-6 and 17-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/29/2003</u> . | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 8 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Oehlbeck et al. U.S. Patent 6,778,290 B2.

Refer to Figure 1 of '290 B2, for example.

Claim 1 sets forth: "A projector, comprising (See the Background of the Invention and the Summary of the Invention):

at least one light source generating a light beam (See illumination control 42.);

at least one optics system disposed in the light beam (See print engine 24 and column 5, lines 65 through 67.); and

at least one translucent tape at least partially disposed in the light beam (See photosensitive medium 22 and column 5, lines 47 through 64. Magnetic tape may be translucent.), the tape having at least one red segment, at least one blue segment, and at least one green segment (See column 1, lines 10 through 36 and column 6, lines 29 through 39.), the segments moving translationally across the light beam to establish a color image (See supply and take-up reels and gate 46.)."

With respect to claim 8, see supply and take-up reels and the motion controller shown in Figure 1.

Claim 13 is rejected for the same reasons already applied to rejected claim 1.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, 7, 9-12, 14-16, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oehlbeck et al. U.S. Patent 6,778,290 B2.

Oehlbeck teaches all of the elements of claim 2 as discussed in the rejection of claim 1 above in the rejection under 35 U.S.C. 102(e), however '290 B2 does not specifically make use of the terminology "digital light projector (DLP)". The apparatus 10 taught in '290 B2 is clearly a digital device. Also see column 2, lines 26 through 38.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a DMD or micro-mirror device as taught in the BACKGROUND OF THE INVENTION of '290 B2 in place of the LCD taught in the preferred embodiment of '290 B2. The motivation for one having ordinary skill in the art to make such a modification would be to use a single reflective light modulator resulting in a smaller projector.

Claims 3, 14, 15 and 16 are rejected for the same reasons already applied to claim 2.

With respect to claims 7 and 20 see photosensitive medium 22 and column 5, lines 47 through 64 and see column 1, lines 10 through 36 and column 6, lines 29 through 39.

With respect to claims 9 and 22, see column 9, lines 36 through 55.

Claim 10 is rejected for the same reasons already applied to rejected claim 1.

With respect to claim 11 again refer to photosensitive medium 22, film gate 46 and supply and take up reels shown in Figure 1, for example.

With respect to claim 12, refer to column 8, lines 33 through 50.

With respect to claim 21, see supply and take-up reels and the motion controller shown in Figure 1.

#### ***Allowable Subject Matter***

Claims 4-6 and 17-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

Each and every limitation of dependent claims 4-6 and 17-19 patentably distinguishes those claims over the prior art of record. In particular, the prior art of record neither shows nor suggests all of the elements of claims 4 and 17 in combination "wherein the tape is endless".

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Her U.S. Patent 6,545,754 B2 teaches a post-seal inspection system and method.

Sachs U.S. Patent 5,483,259 teaches a color calibration of display devices.

Bitoh U.S. Patent 4,788,587 teaches a document reading apparatus utilizing printer mechanism with a color filter tape.

Tsukamura U.S. Patent 4,455,579 teaches an apparatus for producing a color picture on recording paper.

Lee et al. U.S. Patent 6,843,567 B2 teaches highly efficient scrolling projection system and method.

Kim et al. U.S. Patent Application Publication US2004/0119947 A1 teaches a cylindrical lens array for scrolling colors, projection system using same and scrolling method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa J. Koval whose telephone number is (571) 272-2121. The examiner can normally be reached on Monday through Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJK



Handwritten signature of Melissa Jan Kovach, written diagonally across the bottom right of the page.